



INSURANCE SPECIAL REPORT

A Preliminary Evaluation of New York and
New Jersey Insurance Injury Claim Results
Before and After Enactment of Mandatory
Seat Belt Legislation, 1983-85 Models

Highway Loss Data Institute
A-27

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HLDI A-27

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SUMMARY

New York and New Jersey were among the first states to enact legislation requiring front seat occupants of passenger cars to wear seat belts. This Highway Loss Data Institute (HLDI) report presents preliminary results only on the frequency of insurance claims for injuries to occupants of 1983-85 model year vehicles before and after these states enacted seat belt statutes; it does not address the cost of the injury claims. To assess the effect of the legislation on insurance claims, post-law results for New York and New Jersey are compared to pre-law results for the same period one year earlier, and to results for Connecticut, which did not have a belt use law during the periods covered in this report. The injury results for the first nine months following implementation of the New York law (January 1, 1985 through September 30, 1985) are compared to the injury results for the corresponding nine-month period one year earlier (January 1, 1984 through September 30, 1984). Because New Jersey's statute became effective on March 1, 1985, the pre-law and post-law comparisons are for seven-month periods (March 1 through September 30 of 1984 and 1985, respectively). The results presented in this report are based on personal injury protection and collision insurance coverage losses reported for these periods.

Principal Findings:

- After implementation of seat belt use laws, both New York and New Jersey had overall injury claim frequency results for relatively new cars (model years 1983-85) that were lower than those before the laws were enacted. The decline in claims for injuries more likely to have resulted from frontal impact crashes was slightly greater than the overall decline in injury claims. During the same periods, Connecticut, which had no concurrent seat belt law, had slightly increasing overall injury claim frequencies.
- The frequencies and costs of collision coverage claims were essentially the same in each of the three states (New York, New Jersey, and Connecticut) before and after seat belt laws were passed in New York and New Jersey. Thus, the declines in injury claim frequencies for New York and New Jersey are not the result of corresponding decreases in collision claims.
- Comparison of quarterly claim frequency results for New York and New Jersey with those for Connecticut suggests that the effect of the seat belt laws on injury results was greatest in the initial periods following enactment of the laws.

INTRODUCTION

The Highway Loss Data Institute (HLDI) is a non-profit, public service organization that gathers, processes, and publishes insurance data concerning the human and economic losses associated with motor vehicles — especially the ways such losses vary among different kinds of vehicles.

New York passed the first state law requiring the use of seat belts by all front seat occupants of passenger cars in July of 1984; enforcement of the law began January 1, 1985. New Jersey quickly followed New York's action with a law requiring belt use by front seat occupants beginning March 1, 1985. The stronger New York law specifies a maximum \$50 fine compared to a \$20 fine under New Jersey's law. In addition, New York's statute permits police to stop motorists solely on the basis of belt use law violations. Under New Jersey law, police are not permitted to cite violators unless they have been stopped for some other traffic violation.

This HLDI report presents results on the frequency of injury claims* to occupants of relatively new cars (1983-85 model years) before and after New York and New Jersey enacted their mandatory seat belt use laws; it does not address the cost of the injury claims. Results are also presented for Connecticut, which did not have a seat belt use law in effect during the period covered in this report. (Connecticut has since passed a law providing for a \$15 fine for failure to wear seat belts after February 1986.) Connecticut was chosen as a comparison state because of its geographic closeness to New York and New Jersey, and because all three states have no-fault automobile insurance laws.

Several other states have recently passed seat belt use laws; however, there has not yet been sufficient experience with these laws to provide meaningful comparisons of their insurance loss results. Even the results presented in this report should be considered preliminary because they are based on relatively short periods following enactment of the laws and injury claims for only relatively new cars. Compliance with seat belt laws is usually higher during the initial months of implementation because of increased publicity and public awareness; therefore, a more thorough assessment of the laws' effects can only be made as insurance claims information from additional states over longer periods become available.¹

The results in this report are based on personal injury protection and collision coverage loss data supplied by 13 insurers: Aetna, Allstate, Firemen's Fund, GEICO,

Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, Sentry, State Farm, Travelers, and USAA.

RESULTS AND DISCUSSION

For the analyses performed in this study, only loss results of 1983-85 model year passenger vehicles with both personal injury protection and collision coverage simultaneously in effect were used. Table 1 presents overall injury claim frequencies** for New York, New Jersey, and Connecticut. For each state, the injury claims are summarized separately for pre-law and post-law periods. For New York, the pre-law period covers January to September 1984 and the post-law period covers January to September 1985. Because New Jersey's statute did not become effective until March 1985, its pre-law period covers March through September 1984 and its post-law period covers March to September 1985. The Connecticut results are given both for the nine-month New York periods and for the seven-month New Jersey periods. For each of the states, pre-law results include 1983 and 1984 models and the post-law results include 1983, 1984, and 1985 models. For New York, the pre-law results are based on just over 300,000 insured vehicle years of exposure and the post-law results are based on just over 500,000 insured vehicle years. New Jersey's pre-law results are based on approx-

TABLE 1 Frequency of Injury Claims, Model Years 1983-85

State	Claim Frequency Per 1,000 Insured Vehicle Years		Percent Change
	Before Law	After Law	
New York	20.8	19.8	-5%
Connecticut	19.1	19.3	+1%
New Jersey	22.3	20.7	-7%
Connecticut	19.0	19.2	+1%

Note: New York's before-law and after-law periods are January through September of 1984 and 1985, respectively; New Jersey's before-law and after-law periods are March through September of 1984 and 1985, respectively; Connecticut's comparison periods correspond to those of New York or New Jersey.

*In calculating injury claim frequencies, all injuries in a crash-involved car resulting in claims for medical expenses made under personal injury protection insurance coverages are counted as a single claim. A description of these first-party coverages, which principally insure against medical losses to occupants of the insured cars themselves, is given in Appendix B.

**These results are standardized to insure the same mix of exposure from youthful and no-youthful operators. For a more detailed discussion of standardization, see Appendix A.

TABLE 2 Summary of Collision Coverage Losses, Model Years 1983-85

State	Claim Frequencies Per 100 Insured Vehicle Years		Average Loss Payment Per Claim		Average Loss Payment Per Insured Vehicle Year	
	Before Law	After Law	Before Law	After Law	Before Law	After Law
New York	11.7	11.9	\$1,615	\$1,628	\$189	\$194
Connecticut	10.0	10.3	\$1,720	\$1,732	\$172	\$178
New Jersey	10.7	11.1	\$1,642	\$1,710	\$176	\$190
Connecticut	9.7	9.7	\$1,721	\$1,726	\$167	\$167

Note: New York's before-law and after-law periods are January through September of 1984 and 1985, respectively; New Jersey's before-law and after-law periods are March through September of 1984 and 1985, respectively; Connecticut's comparison periods correspond to those of New York or New Jersey.

imately 92,000 insured vehicle years of exposure and the post-law results are based on approximately 156,000 vehicle years. For the comparison with New York, Connecticut results are based on approximately 70,000 insured vehicle years for the pre-law period and 110,000 insured vehicle years for the period after New York's law. For the comparison with New Jersey, the corresponding pre-law and post-law Connecticut exposures for the seven-month periods are approximately 59,000 and 89,000 insured vehicle years, respectively.

For all personal injury protection claims, New York's pre-law claim frequency of 20.8 claims per 1,000 insured vehicle years declined by five percent to 19.8 claims during the first nine months of its mandatory seat belt law; whereas claim frequency in Connecticut, with no concurrent seat belt law, increased by one percent. Similarly, New Jersey's injury claim frequency dropped by seven percent during the seven months following enactment of its seat belt law compared to a one percent increase in Connecticut. It is also interesting to note that an analysis comparing crash fatalities during the first nine months of New York's law with those of neighboring states without a law showed a reduction of approximately nine percent in New York.²

Because it was possible that the post-law reductions in injury claim frequencies in New York and New Jersey simply reflected reduced levels of collision involvement during the post-law periods, the collision loss results for the two periods in each of the states were compared. Table 2 presents a summary of the frequency and cost of collision claims* in New York, New Jersey, and Connecticut during the pre-law and post-law periods of interest. The frequencies and costs of collision coverage claims were essentially the same in each of the three

states before and after seat belt laws were passed in New York and New Jersey. Thus, the declines in injury claim frequencies for New York and New Jersey are not the result of corresponding decreases in collision claims.

The injury claims used to calculate the frequencies presented in Table 1 may or may not also have an associated collision coverage claim. In the overwhelming majority of crashes with injury claims, there is vehicle damage even when there is no collision claim. In cases where there is no collision coverage claim for the same crash, the collision damage costs are recovered through a property damage liability claim from the insurer of other involved vehicles that were at fault; they are below the collision deductible amount; or they are not being recovered through automobile insurance. Collision coverage claims often are for the vehicle at fault. Consequently, they tend to be dominated by front-end damage, whereas, property damage liability claims are for the vehicle not at fault and they are dominated by rear-end damage. Thus, injury claims with associated collision coverage claims are more likely to be from frontal crashes, and injuries with no associated collision coverage claims are more likely to be from rear-end crashes. A previous HLDI report (A-21), which compared injury claim frequencies for 1981-82 Volkswagen Rabbits with automatic belts versus manual belts, presented results that suggested belt systems have a greater effect on injury claims resulting from crashes more likely to be frontal impacts. Therefore, to the extent that the injury claims with no associated collision coverage claim are more likely to be injuries such as whiplash resulting from rear-end impacts, increases in belt use in states with mandatory

*Collision results were standardized to eliminate effects due to operator age group and deductible amounts. See Appendix A for standardization weights.

belt use laws should influence the frequency of such injuries less than injuries in frontal crashes where belts are more effective.

Because of the implicit differences between injury claims with and without associated collision claims, Table 3 presents claim frequencies only for injury claims with associated collision coverage claims (i.e., claims more likely to result from frontal impacts). For these injuries, New York's pre-law frequency of 14.8 claims declined to 13.8 claims after enactment of the mandatory seat belt law—a seven percent decrease. In contrast, after passage of the New York law, the Connecticut results show a one percent increase. Similarly, New Jersey's post-law claim frequency decreased from its pre-law level. For those claims more likely to be from frontal impact crashes, the results in New Jersey fell from 13.2 claims to 12.1 claims—an eight percent decline. Comparable results for Connecticut indicate a decline of only two percent. Thus, for those crashes more likely to be frontal impacts (in which seat belts are most effective), both New York's and New Jersey's claim frequency results decreased after implementation of the law, whereas Connecticut's showed little change. Also, it is interesting to note that the declines in claim frequency in New York and New Jersey for injuries more likely to have resulted from frontal impacts are slightly more pronounced than those for all injuries presented in Table 1.

TABLE 3 Frequency of Injury Claims With Associated Collision Claims, Model Years 1983-85

State	Claim Frequency Per 1,000 Insured Vehicle Years		Percent Change
	Before Law	After Law	
New York	14.8	13.8	-7%
Connecticut	9.9	10.0	+1%
New Jersey	13.2	12.1	-8%
Connecticut	9.9	9.7	-2%

Note: New York's before-law and after-law periods are January through September of 1984 and 1985, respectively; New Jersey's before-law and after-law periods are March through September of 1984 and 1985, respectively; Connecticut's comparison periods correspond to those of New York or New Jersey.

Quarterly Pre-Law and Post-Law Comparisons

Studies of seat belt usage rates in states with mandatory use laws have shown that compliance with the laws generally decreases with time. The Insurance Institute for Highway Safety has conducted observational surveys of shoulder belt use compliance in a number of large urban areas, small cities, and intercity areas of New York and New Jersey.¹ For each state, belt use was observed several months before the law went into effect and during the first month of enforcement. Belt use compliance in New York was also observed during April and August of 1985, and one year after enactment of the law, January 1986. For areas of New Jersey, belt use compliance was also observed in the fifth month of the law, July 1985. For the selected study areas of New York and New Jersey, Tables 4 and 5 present shoulder belt use rates for passenger car drivers and right front passengers combined. For both of the states, large initial increases in belt use were observed over the pre-law levels. In New York, compliance was generally stable for the first and fourth months of the law—January and April of 1985. However, surveys conducted in August 1985 and January 1986 showed, for the most part, much lower levels of compliance in comparison to the January and April 1985 survey results. Although the seat belt law was still relatively new in July 1985, several of the New Jersey areas surveyed during that time showed much lower usage rates in comparison to March 1985 survey results.

To determine whether the injury results for New York and New Jersey show a corresponding decline in benefits, the claim frequency results for injury claims with associated collision coverage claims were examined by calendar quarter. Table 6 presents the quarterly pre-law and post-law results for New York and New Jersey relative to the results for Connecticut. Thus, for example, New York's pre-law relative claim frequency of 152 for the first quarter indicates that its standardized claim frequency is approximately 50 percent greater than Connecticut's result of 10.4.

Based on the pre-law results in Table 6, injury claim frequencies in the absence of seat belt legislation were approximately 50 percent higher in New York than Connecticut. However, after enactment of New York's seat belt law, its claim frequencies ranged from only 35 to 41 percent higher than Connecticut's. The largest decrease in New York's relative results occurred in the first quarter—an 11 percent decline. Decreases for the next two quarters are smaller. Relative quarterly results for New Jersey also show decreases in each quarter following enactment of the seat belt law, but the largest decrease in New Jersey's relative results occurs in the

TABLE 4 Percentage Shoulder Belt Use by Car Drivers and Right Front-Seat Passengers* in New York State

	Pre-Law	Post-Law			
	September 1984	January 1985	April 1985	August 1985	January 1986
Large Urban Areas					
Albany	12	50	52	—	42
Buffalo	12	68	66	47	41
Nassau/Queens	11	49	49	39	38
Westchester/Bronx	15	57	61	—	46
Syracuse	18	81	70	49	54
Small Cities					
Elmira	14	62	52	—	65
Glens Falls	11	55	47	45	42
Jamestown	8	48	48	—	37
Rome	14	60	51	44	38
Watertown	14	43	43	40	39
Intercity	30	76	66	—	61

*Passengers estimated to be under seven years old excluded

Source: Williams, A., Wells, J., and Lund, A. Shoulder Belt Use in Four States With Belt Use Laws. Insurance Institute for Highway Safety, Washington, D.C., 1986.

second quarter—a nine percent decline. The smaller difference in the first quarter results for New Jersey may be due to New Jersey's seat belt law being effective for only one month during that quarter.

Although these results are preliminary, larger reductions in insurance injury claims generally occurred in the periods immediately following enactment of the seat belt laws. This suggests that the reductions in insurance injury claims were smaller as seat belt use declined.

Proportions of Collision Claims With Injury Claims

Table 7 presents New York and Connecticut's pre-law and post-law proportions of all collision coverage claims that have associated personal injury protection claims

by amount of collision damage. Collision damage was determined by adding the collision deductible to the paid claim amount. Except for damage between \$1 and \$1,000, New York's post-law proportions are consistently lower than its pre-law proportions. Differences in New York's pre-law and post-law results are smallest for the high and low ends of the collision damage amount groups. Corresponding pre-law and post-law proportions for Connecticut during the same nine-month period show both increases and decreases within the collision damage groups. However, for each collision amount group New York's percentage changes generally indicate larger decreases or smaller increases between its before-law and after-law results compared to Connecticut's corresponding percentage change results.

A similar presentation is made in Table 8 for New Jersey and Connecticut. The pre-law and post-law results of both states are again based on seven-month periods. Except for collision damage between \$2,001 and \$3,000, New Jersey's post-law proportions were consistently lower than its pre-law results. Again, with the exception of collision damage between \$2,001 and \$3,000, New Jersey's percentage changes generally indicate more of an improvement between the pre-law and post-law results than is observed in the Connecticut results.

The preliminary results presented in Tables 1 through 8 indicate that mandatory seat belt legislation can lead to reductions in the frequency of insurance injury claims.

REFERENCES

1. Williams, A., Wells, J., and Lund A. Shoulder Belt Use in Four States with Belt Use Laws. Insurance Institute for Highway Safety, Washington, DC, 1986.

2. Lund A., Pollner J., and Williams A. Preliminary Estimates of the Effects of Mandatory Seat Belt Use Laws. Insurance Institute for Highway Safety, Washington, DC, 1986.

TABLE 5 Percentage Shoulder Belt Use by Car Drivers and Right Front-Seat Passengers* in New Jersey

	Pre-Law	Post-Law	
	November 1984	March 1985	July 1985
Large Urban Areas			
Paramus	17	41	48
Hackensack	16	58	47
Passaic/Patterson	13	58	47
Montclair/Bloomfield	16	61	43
Oranges/Newark	24	56	53
Jersey City	15	55	52
Union	20	62	52
Elizabeth/Linden	14	54	46
Trenton	11	41	36
Camden	20	38	36
Small Cities			
Atlantic City	9	25	19
Vineland	8	33	23
Intercity	—	—	54

*Passengers estimated to be under seven years old excluded
Source: Williams A., Wells, J., and Lund, A. Shoulder Belt Use in Four States with Belt Use Laws, Insurance Institute for Highway Safety, Washington, D.C., 1986.

TABLE 6 Injury Claim Frequencies* by Calendar Quarter, Model Years 1983-85

Calendar Year Quarter	New York Quarterly Relative Claim Frequency**	New Jersey Quarterly Relative Claim Frequency**	Connecticut Quarterly Claim Frequency Per 1,000 Insured Vehicle Years
1st Quarter			
Before Law	152	124	10.4
After Law	135	120***	10.1
Percent Change	-11%	-3%	
2nd Quarter			
Before Law	148	140	10.1
After Law	140	127	9.8
Percent Change	-5%	-9%	
3rd Quarter			
Before Law	151	126	9.5
After Law	141	119	10.1
Percent Change	-7%	-6%	

*Based on injury claims with associated collision claims only.

**Quarterly results for New York and New Jersey are expressed relative to Connecticut's quarterly results.

***NOTE: This quarterly claim frequency for New Jersey is based on one month of results following enactment of the law (March 1985) and two months of results prior to enactment (January and February 1985).

TABLE 7 Comparison of New York and Connecticut Collision Coverage Claims With Associated Personal Injury Protection Claims, Model Years 1983-85

Collision Damage Amount	Seat Belt Law*	New York		Connecticut	
		No. of Collision Claims	Proportion of Collision Claims With Injury Claim	No. of Collision Claims	Proportion of Collision Claims With Injury Claim
\$1-\$1000	Before	14,964	0.029	2,924	0.022
	After	24,146	0.030	4,611	0.023
	Percent Change		+ 3.4%		+ 4.5%
\$1001-\$2000	Before	8,685	0.080	1,570	0.054
	After	14,588	0.071	2,574	0.057
	Percent Change		-11.3%		+ 5.6%
\$2001-\$3000	Before	3,903	0.181	668	0.145
	After	6,761	0.152	1,220	0.125
	Percent Change		-16.0%		-13.8%
\$3001-\$4000	Before	2,105	0.267	384	0.211
	After	3,894	0.234	666	0.209
	Percent Change		-12.4%		-0.9%
\$4001-\$6000	Before	2,150	0.390	408	0.341
	After	3,707	0.356	638	0.317
	Percent Change		-8.7%		-7.0%
>\$6000	Before	2,427	0.509	498	0.504
	After	3,913	0.489	781	0.524
	Percent Change		-3.9%		+ 4.0%

*Before-law results are based on nine-month period of January 1 through September 30, 1984. After-law results are based on nine month period from January 1 through September 30, 1985. Connecticut did not have a seat belt law during these periods.

TABLE 8 Comparison of New Jersey and Connecticut Collision Coverage Claims With Associated Personal Injury Protection Claims, Model Years 1983-85

Collision Damage Amount	Seat Belt Law*	New Jersey		Connecticut	
		No. of Collision Claims	Proportion of Collision Claims With Injury Claim	No. of Collision Claims	Proportion of Collision Claims With Injury Claim
\$1-\$1000	Before	4,131	0.035	2,399	0.023
	After	6,646	0.033	3,534	0.024
	Percent Change		-5.7%		+ 4.3%
\$1001-\$2000	Before	2,316	0.087	1,290	0.053
	After	3,689	0.073	1,916	0.056
	Percent Change		-16.1%		+ 5.7%
\$2001-\$3000	Before	981	0.173	542	0.157
	After	1,680	0.180	899	0.133
	Percent Change		+ 4.0%		-15.3%
\$3001-\$4000	Before	546	0.326	314	0.204
	After	940	0.246	488	0.227
	Percent Change		-24.5%		+ 11.3%
\$4001-\$6000	Before	485	0.404	330	0.342
	After	890	0.384	459	0.336
	Percent Change		-5.0%		-1.8%
>\$6000	Before	512	0.621	420	0.526
	After	901	0.552	597	0.536
	Percent Change		-11.1%		+ 1.9%

*Before-law results are based on seven-month period of March 1 through September 30, 1984. After-law results are based on seven-month period from March 1 through September 30, 1985. Connecticut did not have a seat belt law during these periods.

APPENDIX A Standardization

Insurance loss experience varies in relation to certain nonvehicle factors. With respect to Personal Injury Protection (PIP) coverages, one important factor that influences loss experience is operator age. Youthful operators generally have worse loss experience than older drivers. Thus, the proportions of youthful operators must be taken into consideration in comparing the loss experience of different vehicles.

To remove any biases that could result because of variations among different vehicles in an operator age group, the PIP coverage results for the vehicles in this study were weighted, or standardized, to produce a weighted average of actual results. The weights used in the standardization procedure are shown below.

Operator Age Group	Distribution
Youthful	.10
No Youthful	.90

With respect to collision coverages, both the frequency and average size of collision losses vary with the

deductible amount and the age group of the operators. Therefore, collision coverage results for the vehicles in this study were standardized using the weights shown below.

Deductible	Youthful Operator	No Youthful Operator
< \$150	.05	.50
≥ \$150	.05	.40

Standardizing on these nonvehicle factors ensures that the mix is the same for each result. Therefore, to the extent that age distributions within each operator age group and amounts within each deductible group do not vary substantially for different vehicles, these effects will not bias comparisons among the various results.

The standardization procedure employed is widely used in health statistics.* The basic principle of the method is the introduction of a selected population with a standard distribution across operator age group or across the combination of operator age group and deductibles, as represented by the standardization weights in the tables.

*For example, see Armitage, P. *Statistical Methods in Medical Research*. Wiley, New York (1971).

APPENDIX B Definitions

Definitions Average Loss Payment Per Claim — The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid, expressed as dollars per claim.

Average Loss Payment Per Insured Vehicle Year — For a group of vehicles, the product of claim frequency and average loss payments per claim, divided by 100; expressed as dollars per insured vehicle year. It should be noted that this definition differs from the commonly used insurance term pure premium, but yields similar results.

Collision Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group; expressed as claims per one hundred insured vehicle years.

Collision Coverages — As defined in insurance contracts, the coverage under which people insure their own vehicle against loss caused by collision.

Deductible Amount — That portion of the collision damage cost borne by the policyholder. For computing results, deductible amounts are split into two groups; less than \$150 (mainly \$50 and \$100 deductibles) and

greater than or equal to \$150 (mainly \$200 and \$250 deductibles).

Exposure — The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Personal Injury Protection (PIP) Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group; expressed as claims per one thousand insured vehicle years.

Personal Injury Protection Coverage — First-party no-fault coverage in which an insurer pays, within the specified limits, the medical, hospital, and other expenses of the insured, others in his vehicle, and pedestrians struck by him.

Operator Age Group — The factor that distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see Youthful Operator).

Rated Driver — The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Youthful Operator — For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of age.

HLDI Publications

Research reports published by the Highway Loss Data Institute are:

R72-1 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1972 Models, June 1973.

R73-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1973 Models Compared with 1972 Models, September 1973.

R73-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models, March 1974.

R73-3 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two Years, December 1974.

R73-4 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Three Years, December 1975.

R74-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1974 Models, May 1974.

R74-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year, December 1974.

R74-3 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Two Years, December 1975.

R75-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1975 Models, July 1975.

R75-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1975 Models During Their First Year, December 1975.

R76-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1976 Models, June 1976.

R76-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1976 Models During Their First Year, 1975 Models During Their First Two Years, 1974 Models During Their First Three Years, December 1976.

R77-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1977 Models, June 1977.

R77-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1977 Models During Their First Year, 1976 Models During Their First Two Years, 1975 Models During Their First Three Years, December 1977.

R78-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1978 Models, June 1978.

R78-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1978 Models During Their First Year, 1977 Models During Their First Two Years, 1976 Models During Their First Three Years, January 1979.

R79-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1979 Models, June 1979.

R79-2 Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1979 Models During Their First Year, 1978 Models During Their First Two Years, 1977 Models During Their First Three Years, December 1979.

R80-1 Automobile Insurance Losses, Collision Coverages; Initial Results for 1980 Models, June 1980.

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